

ALLIANT ENERGY

October 15, 2001

John Heinrich
Wisconsin Department of Natural Resources
IO 1 South Webster Street
Madison, WI 53701

Re: Comments on the Proposed Mercury Rule (NR 446)

Dear John,

Thank you for the opportunity to submit comments on the Department's proposed mercury reduction rules.

Attached for the DNR's consideration, please find the Alliant Energy - Wisconsin Power and Light (VvTL) comments discussing several key concerns we have on implementation of this rule. These are our initial comments and we may provide more feedback in the next two weeks as we continue to evaluate the proposed rule impacts.

We are willing to discuss our specific comments and please do not hesitate to contact us should you have further questions. You can feel free to call either Michele Pluta at 2523345 or Jill Stevens at 252-0446.

Sincerely,

Joseph E. Shefchek
Managing Director, Environmental Health & Safety

Comments on AM-27-01, NR 446 - Control of Mercury Emissions

EXECUTIVE SUMMARY

Alliant Energy - Wisconsin Power and Light Company ("WPL") appreciates this opportunity to provide comments to Wisconsin Department of Natural Resources (DNR) on the proposed NR446 mercury emission rules.

WPL supports mercury emission standards that are based on sound science and realistic technology assessments. The standards need to take into consideration the potential impacts on electric reliability and price to customers. Emissions do not recognize state or national boundaries, so policies should strive to be consistent in creating solutions that address emission issues from a regional and global perspective.

The proposed NR446 mercury regulations present broad implications to the future viability of Wisconsin's energy systems that will result in significant economic impacts to utility customers. The rule fails to address several critical technical issues that cause it to be unduly burdensome and unfeasible to implement. As drafted, the rule presents many concerns with respect to:

- 1) Wisconsin's energy policies including electric reliability and reliance on natural gas;
- 2) Costs and revenue impacts;
- 3) Alignment with Federal rules;
- 4) Assessment of environmental benefits; and
- 5) Technical feasibility.

These potential implications are discussed in detail below.

In conclusion, reducing mercury emissions in Wisconsin alone will have an insignificant effect on the state's fish advisories. The DNR must embrace a more sensible approach in order to achieve their goal of Wisconsin leading the nation in achieving mercury emission reductions. The reasonable solution to reducing mercury emissions in Wisconsin is beginning with a feasible and realistic first step. We continue to strongly support the recommended alternative of 10 percent and 40 percent reductions in five and ten years respectively, which would then be followed by alignment with the upcoming federal legislation. This approach is a good compromise for all stakeholders involved, allowing mercury emission reductions to be addressed most equitably as a regional and national issue.

ENERGY POLICY CONCERNS

Electric Reliability

The proposed mercury rule requires an expansive assessment of reliability because it seeks such a massive change in the predominant source of electric energy within a very short timeframe. The requirement to remove 90% of the mercury will result in fundamental changes to the operation of Wisconsin's coal plants.

Changing the dispatch of or requiring significant modifications to coal-fired plants affects all aspects of the electrical system. Each alternative to coal, ranging from fuel switching to new technologies, has specific often unanticipated and adverse consequences on the system. For instance, coal is used primarily for base load. Coal units operate around the clock and are the last units to be taken off the system as load demand declines. Excess reliance on natural gas-fired generation may produce significantly lower reliability at times of peak gas delivery demand because Wisconsin does not have the ability to store natural gas locally for immediate use. Coal-fired units, on the other hand, typically have several weeks of fuel supply at the plant. This concern would not be significant if the anticipated changes in the use of coal were marginal in nature.

Reliance on Natural Gas

The extreme mercury reduction requirements coupled with the 1.5 to 1 offset ratio in the proposed rule make far greater reliance on natural gas in Wisconsin inevitable. Significant fuel switching is simply not practical for numerous reasons including:

- 1) Wisconsin lacks adequate gas pipeline infrastructure.
- 2) Building the infrastructure will be very capital intensive.
- 3) Increased reliance on natural gas will drive up the price.
- 4) Obstacles to building new gas pipeline such as environmental and siting issues will not be quickly or easily overcome.
- 5) Availability and storage of natural gas will require significant additional investment.
- 6) There are intermediate to long-term problems with available supply of natural gas.
- 7) Increased reliance on natural gas will place greater demands on the gas delivery system creating severe impacts on the pressure and flow of gas in the pipeline.
- 8) Coal-fired facilities have months of reserves on site to respond to system changes, while gas reserves (if available) will be far less reliable.
- 9) Construction of new power plants is not easily or quickly accomplished.

In the unlikely scenario that natural gas infrastructure issues could be overcome, the natural gas market must be carefully considered. It was clearly demonstrated during the winter of 2000-2001, that when demand increases beyond supply, prices must move to very high levels to induce a decrease in demand. The use of natural gas in large central or distributed generation facilities is not a price sensitive application. Operators of such facilities will be forced to use the amount of natural gas necessary to meet the demands of the electric system. Customers would likely be faced with both electric and gas price increases.

COST AND REVENUE IMPACTS

The DNR has the primary role in objectively determining both the environmental impacts of mercury rulemaking and the relative levels of cost impact on the state and its citizens. The citizens of Wisconsin do not have an unlimited source of capital to address environmental concerns. It appears that there will be very little benefit and only added cost to ratepayers from mercury reductions by Wisconsin utilities.

Cost Estimates in the Proposed Rule

The DNR's cost estimates for the proposed rule are woefully inaccurate and do not take into account O&M costs, loss of revenue from the sale of combustion byproducts, costs of replacement power during outages necessary for installing mercury control equipment, plus many other variables. In addition, DNR's assumption that, "The application of activated carbon injection at a 70% reduction level to one primary unit for each of the four major utilities would achieve an overall 30% reduction in major utility baseline mercury emissions in Wisconsin", is not true.

Consumer Costs for Mercury Control

The costs of this rule to the consumer are tremendous. In the rule assessment documents, DNR costs have grossly underestimated the average consumer use at only 100-121 kWh per year. Based on WPL's average residential and industrial customer usage rates and DNR's lowest control costs, estimated customer costs are summarized below. As noted above, these costs will be even greater when factoring in O&M and other economic impacts that were not considered by the DNR in their evaluation.

| NR446 Target Level | DNR Reduction Cost \$/kWh(') | Average Annual Estimated Use (Mh)(2) | Annual Household Residential Increase (\$/year) | Average Annual Cost Use (kWh) (2) | Annual Industrial Industrial Cost Increase (/year) |
|--------------------------|------------------------------------|---|---|--|---|
|--------------------------|------------------------------------|---|---|--|---|

| | | | | | |
|-----|-------|-------|-------|-----------|-----------|
| 30% | 0.019 | 7,920 | 150 | 5,160,000 | 98,040 |
| 50% | 0.044 | 7,920 | 348 | 5,160,000 | 227,040 |
| 90% | 0.260 | 7,920 | 2,059 | 5,160,000 | 1,341,600 |

- 1) Low end of DNR's cost/kWh scale used to determine annual cost impact, except for 90% reduction target which only had one cost listed.
- 2) Annual average residential and industrial customer use based on year 2001 rate case. Industrial use will vary dependent on economic conditions.

Loss of Revenue from Coal Combustion Products

Carbon injection is currently the most promising add-on technology for removing mercury. However, carbon injection has yet to be proven effective in a full-scale project. Carbon injection will very likely contaminate fly ash, making it unsuitable for recycling in concrete products. Currently Wisconsin utilities beneficially use approximately 75% or more of the coal combustion byproducts generated. This is twice the national average. Contamination of coal combustion byproducts as a result of carbon injection could result in approximately 1.5 million cubic yards of additional material being land disposed in Wisconsin. This means a cost of over \$22 million annually for land disposal in addition to the lost revenue of over \$12 million per year. Wisconsin utilities would be forced to pass these costs onto ratepayers.

Stranded Costs

Under the proposed reduction requirements in the draft mercury rule, utilities will be forced to make difficult planning choices that will directly impact ratepayers. If carbon injection becomes commercially available, even in conjunction with baghouses/fabric filters, the two technologies combined are unlikely to reach the goal of 90% reduction in mercury emissions. From a planning perspective, the choice will be to either wait for additional add-on technologies to reach the 90% reduction requirement or strand the costs associated with the carbon injection and baghouses in order to implement large scale replacement of coal units with natural gas. Given that outages for maintenance or equipment installation must be planned years in advance, there is no way to approach this dilemma without significant financial risk. Also, with proposed multi-pollutant legislation, the collateral benefits of SO₂ and NO_x reductions could change the selection of mercury control technologies. However, quantification of the co-benefits of SO₂ and NO_x technologies on mercury removal are still in the early stages of assessment.

ALIGNMENT WITH FEDERAL RULES

EPA has concluded that hazardous air pollutants, including mercury, should be controlled on a national level and is scheduled to have federal regulations effective by 2004. The provisions of NR 446.13(3)(a) offer no certainty that Wisconsin utilities will not continue to be subject to mercury reduction requirements that are considerably more stringent than the rest of the country. It is imperative that Wisconsin not be burdened with costly mercury reduction requirements that are more stringent than other states. All utilities pass along generation costs in part to their customers. Higher costs for utilities means higher costs for every citizen in the state. VVTL recommends the DNR change the rule language to read that Wisconsin's regulated facilities will not be required to control mercury beyond any federal requirements.

ASSESSMENT OF ENVIRONMENTAL BENEFITS

Global Perspective

Mercury in the environment is a global issue. According to the Department of Energy, about 5,000 tons of mercury is annually released into the air worldwide. There are other figures published that estimate as much as 3000 tons of mercury emissions deriving from natural sources. In addition, newly discovered sources of mercury emissions, such as landfills and forest fires, are also undergoing research. Studies show that mercury travels hundreds of miles in the earth's atmosphere. The United States accounts for about 3 percent of the world's total mercury emissions. U.S. power plants account for only 150 tons or 1 percent of the world total. Wisconsin power

plants emit approximately one ton of mercury annually - this represents approximately 0.02 % or 2 hundredths of one percent to global mercury emissions. There are no documented scientific studies on mercury deposition that support with any certainty; the proposed rule's reductions when made in Wisconsin will have any impact on our state's fish advisories. Rather reductions must also be made from sources outside the state, thus further supporting the need for consistency with federal rules. Clearly even 100% reduction of the one ton from Wisconsin power plants cannot impact mercury deposition and fish advisories in the state. There will be no benefit to the citizens of Wisconsin resulting from the rule, other than cost and electric reliability risk.

Mercury Reference Dose

There are many scientific uncertainties about mercury, its different forms, technology to control it, and its health effects. In fact EPA has identified several critical uncertainties that must be resolved before the U.S. can adopt mercury management practices with predictable outcomes. The mercury reference dose used to establish Wisconsin fish advisories is lower than those of other government agencies. The EPA reference dose of 0.1 micrograms/kilogram per day of methyl mercury (the organic toxic form of mercury) is lower than that of the Federal Food and Drug Administration, the Department of Energy, and the Agency for Toxic Substances and Disease Registry (ATSDR) in the Department of Health and Human Services. In fact, the ATSDR has proposed a mercury risk factor that is three times the current risk factor. Adoption of the ATSDR risk factor would eliminate 90% of the current fish advisories. EPA acknowledges the need for additional research on the appropriate mercury reference dose. The DNR is premature in its rush to adopt rules with such severe mercury reduction requirements, especially given the number of scientific uncertainties about control technologies and potential health benefits.

TECHNICAL FEASIBILITY

As part of the public information process, the DNR is gathering input on the proposed mercury rule from a Technical Advisory Group (TAG). Alliant Energy is participating as an appointed member of the TAG that is evaluating and providing recommendations on the rule's feasibility. Significant research is currently underway by the Department of Energy (DOE), Electric Power Research Institute (EPRI), and many other control technology firms worldwide. There is a great need for completing this research because current studies regarding the fate of mercury in the environment and methods for control are all preliminary - with most findings inconclusive at this time. TAG members should be provided adequate time to review the results of these research projects in order to determine the feasibility of the proposed rule requirements.

The DNR's proposed rule needs to adequately address the facts and uncertainties regarding mercury control, specifically: 1) Wisconsin utilities burn western Powder River Basin sub-bituminous coal that is predominantly (over 90%) comprised of elemental mercury as supported by data collected from EPA's Information Collection Request to evaluate federal standards; and, 2) Elemental mercury is the most complex to control and currently there exists no commercially proven technologies for its removal. Results from full-scale testing using activated carbon injection will not be available until mid-2002 with no guarantee that they will achieve the extent of reductions required in this rule. This rule also is shortsighted in that it focuses solely on control of mercury emissions and lacks a comprehensive multi-media approach. Each pound of mercury reduction is a benefit to the environment - whether it is released to air, water or land.

It is crucial that the DNR complete a fair assessment of the proposed rule and allow for necessary revisions based on the public information process and findings of the TAG. In addition to the broader concerns we have with this rule, the language in the most recent version of NR446 as proposed, is lacking in sufficient clarity and detail to make the implementation feasible. The rule is very prescriptive, requiring many extensive administrative applications and reports. The rule language is often conflicting and also lacks a listing of exempt trivial sources or excluded operational conditions.

The core of our comments can be summarized as follows. The rule should be revised to focus on defining reasonable reductions with basic implementation guidance, but with greater latitude in allowing facilities to establish actual emissions levels and implement technical solutions to demonstrate compliance with the

requirements. Specifically, Alliant's viewpoint and concerns with respect to key technical aspects of the proposed rule that require revision are as follows:

Definitions - Under NR446.02(1) the definition of "allowable emissions" is redundant with the definition under NR405.02(2) which should be clarified and also evaluated for consistency with federal regulations. Under NR446.02(1p), the definition of "certified emissions reduction" should delete the word "enforceable" as this is not necessary since reductions do not need to be validated by the need to constantly re-open and change construction or operating permits. Under NR446.02(6e) the definition of "major stationary source" is redundant with the definition under NR405.02(22), which should be clarified. Under NR446.02(10s), we commend that the definition of "pollution reduction project" be revised to delete the word "emissions" and replace this with "any release". In addition, NR446.02(10s)(g) should be deleted as requiring department approval is only a disincentive and administrative burden.

Mercury ambient concentration limit - There is no apparent basis or purpose for this limit given the reduction requirements imposed subsequently in the rule, therefore, this section should be completely deleted.

Baseline determination - Under NR446.03(1)(3), the department has one year to review the baseline submittal and provide written notification of their determination. From receipt of the determination, a source is then capped beginning the calendar year following the written notification to baseline emissions levels. This represents a significant issue in that the department's review time of baseline emissions is longer than the time given a source to react and put measures in place by the ensuing calendar year to ensure baseline emissions are not exceeded. There should be a minimum of 2-years for a source from receipt of the written notice of baseline determination in order to ensure necessary changes are part of the budget cycle, operational changes put into place, and other related permits are secured. Similarly, this issue also needs to be addressed for newly affected sources under NR446.03(2)(b)5.

Under NR446.03(1)(d) and NR446.03(2)(b)4 the regulation has provisions for an alternative baseline with approval left to the "department's satisfaction" - this provision is too vague and discretionary therefore undermining any flexibility afforded by this option. In order to allow regulatory certainty, the department needs to develop technical criteria by which alternative baselines are to be reviewed in order to gain the full benefits as well as streamline efforts. These criteria must include normalization of mercury emissions data to ensure generation capacity is adequately represented for baseline levels so that there is sufficient operational flexibility.

The rule at NR446.04 currently requires development of a retroactive baseline for the years 1998-2000 based on estimates of coal mercury content, quantities consumed, stack testing and random sampling of combustion by-products to assess current control equipment efficiency. There are several potential issues with this type of approach including availability and variability of representative mercury concentration data and use of a one-time stack test as the basis to represent mercury removal during continuous operational conditions. Mercury emissions are affected by numerous factors including existing non-mercury emissions control systems, duct-length and site physical constraints, fly ash carbon content and in-flight contact time, coal chlorine and other trace mineral content, etc... Therefore, the baseline stack test methods proposed assume too great a level of accuracy in measurement of low emissions levels when in reality this is at best a snapshot in time of random mercury sampling data and removals during non-steady state flue gas conditions. In addition, baseline calculations should be done using methods that are consistent with requirements under other federal programs such as New Source Review or future proposed multi-pollutant legislation.

Under NR446.04(1)(a) the definition of "combustion unit" should be clarified and also the word "associated" should be replaced by "applicable" which is more appropriate. More clarification is required for the level of detail necessary in the report required under NR446.04(1)(b) including the type of consumption records and a definition of what constitutes "fuel". In addition, it should not be required to submit data on chlorine, sulfur, ash and heat contents since it is not relevant to the baseline as well the information is publicly available from EPA's ICR summaries. Under NR446.04(1)(b)2.a. there is a problem with technical consistency if past analyses were

conducted using methods other than ASTM, which would mean this data would not be comparable to future sampling using the ASTM procedures. The sampling and analytical methods under NR446.04(l)(b)4 are too prescriptive and the rule needs to include options to allow more flexibility. Under NR446.04(l)(c), clarification is needed on what is meant with respect to "each fuel" especially for the use of blended fuels. This section also does not address potential process changes to a combustion unit that may have changed the mercury emissions therefore making it impossible to determine the representative removal efficiency of air pollution control equipment compared to the 1998 - 2000 baseline period. The requirement for mercury content of each combustion by-product potentially increases compliance costs unnecessarily and should be optional under NR446.04(l)(c)1.b. allowing the facility to assess whether it would provide any technical value.

Under NR446.04(2) the requirements proposed for the baseline determination at a non-utility stationary source combustion unit are clearly a much more logical and straightforward approach. Alliant requests that the DNR explain the reasons for requiring significantly more stringent baseline evaluations at a utility combustion unit when in reality the basic processes are identical. Alliant recommends that rule language in regards to utility combustion unit baseline determinations be revised to the same as is currently proposed for non-utility units.

Under NR446.04(3) the rule needs to define what constitutes a "process unit" and also clarify the relationship of this section in regards to NR446.04(l) and (2) for noncombustion units.

Mercury emission offsets - The rule at NR446.05 requires that any proposed new or modified source of mercury emissions provide for offsets at a ratio of 1.5 to 1.0. This offset ratio is too high and will not be viable or sustainable. Furthermore, the 10 lb annual allowable mercury emissions threshold is inconsistent and too restrictive compared to that required under NR405.02(27) Table A which is 200 lbs for the Prevention of Significant Deterioration increment. The language under 446.05(2) should be revised to delete the words "allowable" and "or greater".

Mercury reduction requirements - The rule at NR446.06 requires reductions that are too stringent in too short of a timeframe given the current status of known technically feasible and cost-effective mercury control technologies. The merits of these reductions are highly questionable and fail to recognize coordination with Federal regulations for mercury control. Additional issues to the rule implementation include air construction permitting efforts that will be required to approve mercury pollution control systems plus non-mercury air emissions changes as well the planning time to allow for major outages necessary for installation. The rule's cost estimate also does not recognize that utilities installing controls early are not likely to be eligible to obtain rate recovery. Finally, increased control of mercury emissions will change the amount and composition of coalcombustion by-products. Currently, 100% of Alliant's pulverized coal fly ash can be beneficially re-used as cement due to its low carbon content (less than 0.3%). However, carbon injection controls would increase the carbon content to unacceptable levels resulting in a loss of revenue of over one million dollars, not including the additional costs to landfill the fly ash that could be as high as \$45/ton. The use of landfills as a safe alternative is not certain with limited available data in existence on the potential release of mercury either by acid leaching into groundwater or from flare emissions.

Mercury-containing products reduction projects - This provision should be changed to allow credit for any reduction in multi-media mercury releases (not just ambient air per NR446.07(l)(d)) in order to provide incentive to undertake these efforts. This program should also include the ability to take credit for voluntary releases that have already occurred (as opposed to once the rule becomes effective as per NR446.07(2)). Mercury certification application requirements under NR446.07(l) and reporting requirements under NR446.07(6) are also unnecessarily discouraging. Thus, these sections should be removed from the rule and rather it is suggested that multi-media reductions be tracked as an addendum to the annual emissions inventory.

While provisions under NR446.07 were included to provide rule flexibility, this is a very limited option given that many local counties have already undertaken extensive voluntary mercury-reduction projects. The 50 lb threshold to qualify projects is too high, further severely limiting this as a meaningful alternative and should be revised to 0.5 lbs which would be consistent with the level at which mercury is tracked for federal Toxic Release Reporting

requirements. Finally, the DNR's evaluation of costs fails to recognize the significant time and effort involved in completing this type of project and the magnitude of collection that will be necessary to obtain any substantive credits.

Pollution reduction projects - The rule under 446.08 provides for pollution reduction projects, but at 446.08(6) limits this option by not allowing any reductions from a project that are required for local, state or federal requirements that are in effect on the date of certification. This is entirely inconsistent and fails to recognize the overlap of Wisconsin regulations with the proposed 2004 federal regulations for mercury that will require maximum achievable control technology or other multi-media regulations that may result in mercury reductions. At NR446.08(1)(b), there are too many restrictions on the information requirements and this section should be revised to read as follows, "Information that will allow the department to determine that the mercury emission reductions are quantifiable". At NR446.08(2) this should be revised to read as follows, ... curtailing production or operating hours are certified..... The 5.0 lb minimum threshold for certifying pollution reduction projects is too high and should be revised to be 0.5 lbs. As mentioned above, the provisions at NR446.08(5) and (6) should be revised to allow credit for immediate multi-media reductions in mercury from pollution prevention projects. The application requirement under NR446.08(7) should also be removed as it has no basis since there is no law prohibiting the reduction of pollution.

Registry of certified emission reductions - The rule should have provisions in-place to ensure that a registry is in-place as soon as possible so that voluntary reductions can be recorded. The rule also will need to clarify the role of the NR446 registry and the voluntary registry that is currently proposed under NR437. Section 446.09 should clarify the procedures for ensuring the registry is current - especially during the March-August reconciliation period in NR446. 10(1)(e). As done for other state-level emissions trading programs, it is imperative that this section includes provisions for a "set-aside" which would maintain sufficient reduction credits to cover future industrial growth needs or prevent shutdown of a plant solely as a result of achieving compliance with this regulation. Similarly, with the very low quantities of available mercury reductions anticipated to be available, this could lead to an extremely tight market and this rule has no mechanisms to prevent price gouging by credit-holders. The provision under NR446.09(3) which states that the department will update the registry to reduce any certified mercury emission reductions now required due to an effective local, state or federal regulation is counter-productive and would deplete any available reductions making compliance with this regulation unsustainable.

Compliance alternatives and reports - The rule currently requires under NR446. 10 compliance plans due to the department by October 1st that includes extremely detailed operational and maintenance data as well as estimates of anticipated mercury emissions. The preparation of these compliance plans will require a significant burden of time to prepare with much effort spent on prediction of future conditions that are very difficult to quantify with no real value gained. Of specific concern, the compliance plans must include contingency plans for unexpected events or increased demand for electricity including a summary of generation costs and the anticipated additional costs for reducing mercury emissions under those circumstances.

As mentioned previously, under NR446.10(2) the compliance requirements proposed for a non-utility stationary source are significantly less stringent allowing compliance demonstration through the emission inventory report required under NR439. This is a more reasonable approach and Alliant recommends that rule language in regards to utility compliance determinations be revised accordingly.

Considering the small amount of mercury being regulated, the provisions under 446.10(1)(c) and (d) are too restrictive, limiting major utilities such that no more than 25% of certified reductions be from a mercury-containing products reduction project or pollution reduction project performed by another person. Alliant strongly recommends that any proposed alternate compliance procedures provide 100% credit for all mercury reductions. Additional clarification is needed in the rule under NR446. 10(1)(e) on the March-August baseline compliance period for reconciling required reductions including procedures and priority to secure credits as well what period the credits would apply towards.

Annual emissions determination - The rule under NR446.11 requires major utilities to determine and report the annual mercury emissions using a mass balance of mercury contained in all fuels used and by-products produced. Rather, mass balance should be just one option and facilities should be allowed to make their own technical assessment of the best approach for evaluation of annual mercury emissions. The section of the rule needs to further explain what is meant by "all fuels" and "by-products produced". The V;DNR cost analyses of the proposed rule fails to recognize the level of effort to complete the numerous sampling and analyses required for completion of mass-balance estimates under the proposed rule. Furthermore, the level of confidence of such an approach must consider the current precision of monitoring and laboratory analytical methods for mercury. Unless a source uses coal switching to comply with reduction requirements, there is no need for weekly sampling efforts as required under NR446. 11 (1)(a)2. a..

Under 446.11(3), alternative emission monitoring is allowed, but 446.11(3)(b) still requires that alternative monitoring methods conduct a biennial emissions performance test of mercury emissions. Stack testing should not be required if all parameters in the alternative method are already being tracked. Related to this item, there is a language change proposed for NR439.075(2)(b)(1) that should be revised to read "Compliance emission testing for mercury if required for an emission point ...

Finally, since the mercury emissions baseline is an annual compliance requirement, there is no basis or value for the disproportionate emissions determination methods as required in this section which could easily consume more than one full-time employee for collecting samples (weekly or more frequently) plus validating, managing and evaluating the volumes of analytical data. Alliant recommends that section 446.1 I (1) be deleted and rewritten to require that annual emissions be reported consistent with existing compliance reports under NR438 for the annual emissions inventory and also NR407 for operation permit compliance reports - all of which require certification for accuracy by a responsible official which should be more than adequate for the purposes of this rule.

Variance provisions - Under NR446.12, the variance language in the proposed rule is impractical, weak and not flexible enough to accommodate potential reliability, technology, or cost issues. The rule's provisions for a variance from reduction requirements are clearly written for short term, one-time occurrences of electric supply emergencies or fuel supply disruptions. It will not be adequate for the more difficult situation where the compliance standards are not feasible or are so expensive that other fuel sources must be used. The only proposed opportunity to modify the requirements due to infeasible technology or costs offers no direction as to what proof DNR will accept related to technological or cost feasibility issues.

Another concern involves situations where the achieved emissions reductions cannot be maintained due to system failures. For example, if a large natural gas-fired unit or a coal-fired unit with mercury controls fails, the system-wide mercury emissions may exceed an emission limit, and a resulting unit shutdown could jeopardize meeting electric demand. The proposed rule contains language that allows the DNR to waive the standards upon a specific showing by a plant operator. However, this language does not provide adequate assurance of protection from an unanticipated or an after-the-fact determination of an exceedance of mercury emissions standards due to equipment failure. If adequate assurances of immunity from prosecution are not available, then it is possible that operators would shut down facilities immediately rather than risk penalties.

Rule evaluation reports - This section is vague, lacking details on the procedures and criteria for completing technical evaluations. This section also fails to address monitoring of mercury deposition to assess resultant rule impacts on Wisconsin fish advisory levels.